REMARKS

Claims 1-5 and 7-44 are pending in the application.

The Examiner rejects claims 1-5, 7, 8, 10-11, 17-20, 22-23, 31-34, and 41-44 under 35 U.S.C. §102(b) as being anticipated by Yoshikawa (U.S. Patent No. 5,150,387).

The Examiner rejects claim 9 under 35 U.S.C. §103(a) as being unpatentable over Yoshikawa in view of Nishitani (U.S. Patent No. 5,467,372).

The Examiner rejects claims 12, 15, 24 and 27 under 35 U.S.C. §103(a) as being unpatentable over Yoshikawa in view of Goldberg (U.S. Patent No. 6,389,038).

The Examiner rejects claims 13-14, 16, 25, 26 and 28-29 under 35 U.S.C. §103(a) as being unpatentable over Yoshikawa in view of Goldberg and in further view of Yamauchi (U.S. Patent No. 6,122,338).

The Examiner rejects claim 21 under 35 U.S.C. §103(a) as being unpatentable over Yoshikawa in view of Yamauchi.

The Examiner rejects claim 30 under 35 U.S.C. §103(a) as being unpatentable over Yoshikawa in view of Goldberg in further view of Yamauchi and in further view of Murgia (U.S. Patent No. 6,606,600).

The Examiner rejects claims 36-37 under 35 U.S.C. §103(a) as being unpatentable over Yoshikawa in view of Chaddha (U.S. Patent No. 5,621,660).

Applicants amend claims 1-5, 7-11, 13-23, 25-26, 28-41 and 43-44.

Applicants cancel claims 6, 12, 24, and 42, and add claims 45 and 46.

Claims 1-5, 7-11, 13-23, 25-41, and 43-46 remain in the case.

Applicants add no new matter and request reconsideration.

Claim Rejections – 35 USC 102(b) and 103(a)

The Examiner rejects claims 1, 5, 10, 15, 17, 18, 22, 31, 32 and 41 under 35 U.S.C. 102(b) as being anticipated by Yoshikawa. The Examiner further rejects claims 15 and 27 under 35 USC 103(a) as being unpatentable over Yoshikawa in view of Goldberg. The Examiner's rejections are respectfully traversed.

Claim 1 recites *an encoder to encode the first data group of a first data frame and the second data group of a second data frame into a first packet and encoding the first data group of the second data frame and the second data group of a third data frame into a second packet distinct from the first packet.* Claims 10, 15, 22, 27 and 41 recite similar limitations.

The Examiner acknowledges "Yoshikawa does not explicitly state encoding the first data group of the first frame and the second data group of the second frame as a first packet and encoding the first data group of the second frame and the second data group of the third frame as a second packet." Office Action, Page 15, lines 3-5. Yoshikawa, therefore, does not anticipate claim 1, or claims 10, 15, 27 and 41 and their corresponding dependent claims.

And the Examiner alleges Goldberg's MUX discloses the recited *encoder*. Goldberg, column 3, lines 30-40; Figure 3. The MUX, however, discloses combining a plurality of voice frames within individual packets into a super packet as compared to the recited encoder that encodes only portions of two frames into a single packet. Goldberg, column 3, lines 30-40; column 2, lines10-17. This combination of two or more voice frames in a super packet, furthermore, results in an increase of voice data loss due to the packet loss on the network, which is one of the problems that the present invention solves by dividing each voice frame into it low and high band frequency and sending them in different packets. Goldberg, column 3, lines 30-40; Specification, page 3, lines 13-15. Thus the present invention, through encoding only portions of two frames into a single packet, limits the loss of an entire voice frame by ensuring that no individual packet carries the an entire voice frame. Since Goldberg does not disclose an encoder that encodes portions of two frames into a normal sized packet, claim 1 is not anticipated or otherwise obvious in view of Goldberg or any other prior art cited in the office action.

Claim 1 further recites *a transmit buffer to transmit to a network the first packet and the second packet.* Claims 10, 15, 22, 27 and 41 recite similar limitations. Since Goldberg's MUX does not disclose *an encoder for encoding the first data group of a first data frame and the second data group of a second data frame into a first packet and encoding the first data group of the second data frame and the second data group of a third data frame into a second packet distinct from the first packet*, Yoshikawa's multiplexer unit 111 cannot disclose the transmission of the two encoded packets to a network. Yoshikawa, therefore, does not anticipate claim 1, or claims 10, 15, 27 and 41 and their corresponding dependent claims.

Claim 5 recites *a processor coupled with the network interface, where the processor...*

combines the first data group from the first packet with the second data group from the second packet to construct a first single data frame representing both the first high frequency band and the second low frequency band of the same sound signal, and

combines the first data group from the second packet with the second data group from the third packet to construct a second single data frame representing both the first high frequency band and the second low frequency band of the same sound signal.
Claims 17 and 31 recite similar limitations.

The Examiner alleges that Yoshikawa's QMF bank 812 within the Figure 19 receiver discloses the recited processor for combining the first and second data groups from the three received packets to construct two distinct data frames. Yoshikawa, column 23, lines 25-28; Figure 19. The QMF bank 812, however, only discloses combing the data of two received packets and then constructing two voice frames from those packets. Yoshikawa, column 20, lines 46-48; column 23, lines 25-28. The QMF bank 812 does not enable the combining of a first data group from a first packet to a second data group from a second packet and the combining of a first data group from the second packet to a second data group from a third packet because the first packet contains two sets of the first group data and the second packet only contains two sets of the second group data. Figures 17 and 18; Yoshikawa, column 19, lines 56-66; column 20, lines 13-18. Thus, there is no a first group from the second packet to be combined with the second group from a third packet, because the second packet only contains second group data. Since the QMF bank 812 within the Figure 19 receiver does not disclose a processor adapted to combine a first data group from a first packet to a second data group from a second packet and combine a first data group from the second packet to a second data group from a third packet, Yoshikawa does not anticipate claim 5, or claims 17 and 31 and their corresponding dependent claims.

Claim 18 recites *inferring a first group of data representing sound belonging in a first low band of a sound bandwidth... and combining the first data group with the second data group to construct a single frame with data representing sound in both the first band and the second band.* Claim 32 recites a similar limitation.

The Examiner alleges the Figure 19 receiver discloses the inferring of a first group of data belonging to the low band of the sound bandwidth when a packet is lost in transmission through a network. The Figure 19 receiver, however, does not disclose or enable the ability to infer a first group of data belonging to the low band of the sound bandwidth. Further, when the low band data is lost in transmission through the network, the Figure 19 receiver cannot construct a decoded voice frame because all of the reconstruction data used by the QMF bank 812 to properly reconstruct the decoded voice frames is located in the packet that carries the low band data. Figure 17; Yoshikawa, column 19, line 66 – column 20, line 12.

Since the Figure 19 receiver does not disclose the ability to infer a first group of data belonging to the low band and it cannot reconstruct the decoded voice frames when the low band data is lost, Yoshikawa does not anticipate claim 18, or claim 32 and their corresponding dependent claims.

CONCLUSION

For the foregoing reasons, the Applicants request reconsideration and allowance of all claims as amended. The Applicants encourage the Examiner to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

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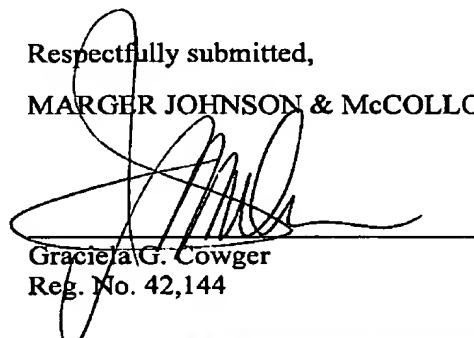
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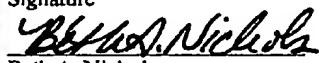
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